UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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September 10, 2010

Richard Doucette
Federal Aviation Administration
New England Regional Office
12 New England Executive Park
Burlington, MA 01803

Re: Draft Environmental Impact Statement for the T.F. Green Airport Improvement Program, Warwick, Rhode Island (CEQ #20100314)

Dear Mr. Doucette:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the T.F. Green Airport Improvement Program in Warwick, Rhode Island. We offer the comments below and in the attachment regarding impacts and issues that should be more fully addressed in the FEIS.

The DEIS describes potential impacts to the human and natural environment associated with airport safety and efficiency enhancement measures proposed by the Rhode Island Airport Corporation (RIAC). The safety improvements focus on Runway 16-34 and are intended to meet FAA requirements. They include improvement of the Runway Safety Area (RSA) for Runway 16-34; demolition of a hanger that penetrates the FAA's Runway Object Free Area (ROFA); and relocation of Taxiway C. The proposed work to increase efficiency is primarily focused on an extension of Runway 5-23 to allow the airport to more fully meet the demand for commercial non-stop service to long-haul markets. The efficiency improvements also include up to eight new passenger gates to improve passenger processing, expansion and relocation of cargo facilities, expansion of passenger and employee parking, expansion of the on-airport fuel storage facility, and changes to on-airport roadways to improve traffic flow. EPA has no comments on or objections to the proposed safety improvements described in the DEIS. Our comments focus on the potential impacts associated with the proposed efficiency enhancements.

Extension of Runway 5-23 is intended to allow the airport to more fully "accommodate demand for commercial non-stop service to long-haul markets" (DEIS page 1-5). If constructed, the extension will generate most of the environmental impact of the project as it affects wetlands and communities off of the airport property. Following an extensive interagency process in advance of the publication of the DEIS, FAA determined that two alternatives would be studied in detail in the DEIS—Alternatives B2

and B4. Alternative B2 features extension of Runway 5-23 approximately 600 feet north and 930 feet south for a total length of 8,700 feet. Alternative B4 would extend Runway 5-23 approximately 1,530 feet south for a total length of 8,700 feet. The DEIS explains that both alternatives would meet the Purpose and Need established for the project and that Alternative B2 would result in greater impacts such as community disruption, mandatory business and residence relocation, and higher construction costs. In addition, the DEIS labels Alternative B4 as "more feasible to construct" than Alternative B2. The community impacts from both alternatives are significant and both would result in over 1200 properties being eligible for sound insulation. Wetland impacts from Alternative B2 are greater than B4 as they include relocation and culverting of 142 linear feet of Buckeye Brook, a locally significant stream which supports a river herring spawning run. Based on all of these factors the FAA identifies Alternative B4 as the preferred alternative.

For the most part the DEIS discussion of the environmental impacts is comprehensive, and we believe that can be attributed in part to the close coordination during numerous meetings over the past few years between the FAA and state and federal agencies. The coordination group, led by the FAA and its consultants, proved especially effective during the development of what ultimately became a less damaging range of alternatives to be considered in the DEIS. The coordination process also included the opportunity to review administrative drafts of the various chapters of the DEIS, a step that also helped the FAA produce a more complete analysis.

We are pleased that the pre-DEIS process resulted in less damaging alternatives, but we note, as does the DEIS, that those alternatives are not without substantial impacts that must be fully considered and addressed. While based on currently available information we do not object to the preferred alternative selected by the FAA, we believe that it will be important to continue to work to eliminate and reduce project impacts and to further refine the mitigation package. To that end we strongly encourage FAA and RIAC to continue to work closely with local, state, federal and tribal interests as the environmental review progresses to further explore ways to minimize project impacts, and where impacts cannot be avoided, to offer meaningful mitigation that includes monitoring to verify that the mitigation is providing the intended benefit. Our attached comments identify areas where the DEIS can be improved and provide questions that should be addressed in the FEIS related to wetland impacts and mitigation, water and air quality impacts, and environmental justice. Please note that EPA will provide additional comments regarding impacts to aquatic resources subject to Section 404 of the Clean Water Act in separate correspondence which will respond to the July 20, 2010 Corps of Engineers public notice.

Based on our review of the DEIS we have rated the DEIS "EC-2—Environmental Concerns-Insufficient Information" in accordance with EPA's national rating system, a description of which is attached to this letter. Please contact Timothy Timmermann (617-918-1025) of EPA's Office of Environmental Review with any comments or questions about this letter.

Sincerely,

H. Curtis Spalding
Regional Administrator

Attachment

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

ECBEnvironmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Attachment: Comments on the Draft Environmental Impact Statement for the T.F. Green Airport Improvement Program, Warwick, Rhode Island

Water Quality

Regulatory Context (EIS Section 5.11 and Technical Report Section WQ 1.1)

The FEIS should discuss the Rhode Island Water Quality Regulations (WQR) more completely. The WQR include antidegradation provisions (Rule 18) which apply to "all projects or activities subject to these regulations which will likely lower water quality or affect existing or designated uses, including, but not limited to any new or modified RIPDES permit." These would apply to any water bodies which would receive a net increase in pollutants as a result of the project. Compliance with the RIDEM Stormwater Management Standards and implementation of deicing best management practices do not eliminate the possibility that the project will still result in some increased pollutant discharges and degradation of receiving waters.

The discussion should address the procedures required for antidegradation review and the anticipated sequence of milestones for the review process, such as the timing of the initial RIDEM review, a description of the public review process, and the design stage at which this will occur. If RIDEM has already conducted a part or all of the review based on existing data, then the results of that review should be included in the FEIS as well as next steps, if any, in the antidegradation review process.

Water Quality Impacts described in Technical Report Section WR5.6.2 and elsewhere

Since the DEIS does not provide a quantification of the additional pollution loading to be expected, with or without best management practices and other mitigation measures, it is not possible for the public or EPA to fully evaluate this impact from the project. The FEIS should translate the increases in the impervious cover to estimated increases in pollutant loading and increases in pollutant concentration within each water body.

Assumptions Regarding Hydrologic Effects (page 5-3 of the DEIS Water Quality Technical Report and repeated earlier sections)

The DEIS analysis of hydrologic effects of the project notes that, "Roads and structures in any areas of mandatory or voluntary land acquisitions (such as the area south of Main Avenue) were assumed to be acquired, demolished and planted with grass. The existing stormwater infrastructure would remain in place." This statement raises two issues that should be addressed in the FEIS.

First, there should be some discussion as to how likely it is that roads and structures will be demolished and replaced with grass, rather than just making a favorable assumption for the purposes of conducting a hypothetical analysis. Since evaluations of impact on water quality, for all alternatives, are dependent on the relative quantity of impervious area, this assumption is a critical basis for the analysis of impacts of the alternatives. Second, it is likely not accurate to say that the conversion of the acquired land to mowed

grass, without removal of existing stormwater infrastructure, results in the same runoff/infiltration characteristics as undeveloped land. The DEIS describes how the land conversion is intended to offset developed (paved) land as part of the project. However, there is not enough information presented to demonstrate that a direct acre-for-acre offset can be assumed. For example, stormwater pipes and bedding materials left in place in developed areas that are converted to mowed grass would continue to drain infiltrated runoff and groundwater to receiving waters thereby providing less of an offset than undeveloped land with no stormwater infrastructure. This difference should be explained and accounted for in the FEIS alternatives comparisons.

If there are unknowns, such as regards conversion of acquired land, then the alternatives analysis should include a range of impacts that reflect that uncertainty. It appears that for the acquired land, only the most optimistic scenario was incorporated in the DEIS analysis, possibly underestimating water quality impacts.

Wetlands and Streams

Alternative B2 features extension of Runway 5-23 approximately 600 feet north and 930 feet south for a total length of 8,700 feet. That work would result in direct impacts to 7.5 acres of wetland, 773 linear feet of stream alteration (including relocation and culverting of 142 linear feet of Buckeye Brook, a locally significant stream which supports a river herring spawning run; Spring Green Pond Inlet Stream; and Tributary A11, an intermittent stream). Alternative B4 would extend Runway 5-23 approximately 1,530 feet south for a total length of 8,700 feet. Alternative B4 would fill 7.3 acres of wetland and includes impacts to 918 feet of two intermittent streams (Tributary A11 and Tributary A). No work would be required in Buckeye Brook for Alternative B4.

We believe that the discussion of wetland impacts in the DEIS is for the most part comprehensive. As mentioned above, we believe the pre-EIS interagency coordination is partly to thank for that outcome. The DEIS characterizes the overall wetland impacts of the project as significant (DEIS page 3-38) and includes a discussion of mitigation measures to address unavoidable impacts. Wetland fill for Alternative B4 would occur within four wetlands at the Runway 34 End of Runway 16-34 and is associated with safety and taxiway improvements. The largest wetland impacted as a result of the work is three acres in size (Wetland A13). This wetland is a degraded wetland dominated by common reed over 1.9 acres of its total area with the balance of the wetland (1.1 acres) subject to periodic maintenance (cutting) to remove vegetative obstructions from FAA controlled airspace. The remaining impacts to wetlands A8 and A6 are common to both build alternatives B2 and B4 and would occur along the existing edges of the current airport development. The overall wetland impacts associated with Alternatives B2 and B4 are relatively similar. However, based on the information provided, we believe that the avoidance of impacts to Buckeye Brook and instream work that only affects two intermittent streams (Tributary A11 and Tributary A1) makes Alternative B4 less damaging to the aquatic environment. Adequate mitigation will be necessary for Alternative B4 to receive approval under Section 404 of the Clean Water Act.

The DEIS includes a general discussion of potential mitigation to address unavoidable wetland impacts. We believe that the discussion should be expanded and suggest that FAA and RIAC convene a working group of state and federal representatives to advance mitigation discussions prior to publication of the FEIS. We understand that FAA policy limits options for establishment of wetland mitigation sites that could affect airport safety and operation (for example, through creation of habitat that could attract waterfowl and other avian species). However, the FEIS needs to provide additional documentation to demonstrate whether the proposed mitigation will adequately address project impacts to wetlands and streams and that the parcels under consideration are actually available for the intended use as mitigation sites. The DEIS provides a good list of sites and how they can be used but it is not clear that the mitigation will adequately compensate for unavoidable impacts. Also, if the wetland mitigation package will incorporate RI watershed wetland restoration sites, the FEIS should demonstrate that the sites have been cleared by RI DEM as viable sites for that purpose.

Environmental Justice

The methodology used to identify environmental justice populations is consistent with the *Guidance for Federal Agencies on Key terms in Executive Order 12898*. The analysis uses the smallest unit for which population data are available (minority and Hispanic populations were identified using census block data and low-income populations were identified using census block group data). These data were then compared to the statewide average and they conclude that the project will not result in disproportionate impacts to environmental justice populations. EPA feels that this approach properly identifies low-income and minority communities for this project and the potential for impacts.

For mandatory land acquisitions impacting affordable housing, FAA and RIAC should ensure that comparable affordable housing is provided. To the greatest extent possible, FAA and RIAC should work to maintain the cohesion of the community impacted by land acquisitions surrounding the airport.

As described in Section 8.2.2, the FAA has conducted extensive public outreach using public meetings, local newspapers, other local media, mailings and personal phone calls. FAA also held one-on-one meetings with community organizations and neighborhood groups. FAA considered the need for translation services and made a determination that they were not needed. EPA supports these outreach efforts and recommends that RIAC and FAA continue to work closely with the affected community.

Air Quality

<u>General Conformity</u>

The DEIS demonstrates that the total of direct and indirect ozone precursors (volatile organic compounds and nitrogen oxides) from both construction and operation related emissions from the airport improvement program fall below the General Conformity

applicability rates of 50 tons of volatile organic compounds per calendar year and 100 tons per calendar year of nitrogen oxides for the Providence, Rhode Island (entire state) 1997 8-hour ozone moderate ozone nonattainment area. General Conformity requirements for the T.F. Green Airport Improvement Program are therefore satisfied, and a General Conformity Determination is not required.

Mitigation for Air Quality Impacts

We support implementation of the air quality mitigation measures identified in the DEIS[1] but believe that additional measures focused on construction period emissions should be implemented and that the FEIS should specify RIAC commitments to implement these measures.

In particular, given public health concerns about diesel exhaust from heavy duty diesel trucks and other heavy duty construction equipment, EPA strongly recommends that measures be implemented to reduce fine particle emissions emitted from diesel engines during construction. Specifically, during construction of the project, we recommend the use of diesel retrofits, cleaner fuels, and idle reduction measures for construction and other diesel equipment. Emissions from older diesel engines can be controlled with retrofit pollution control equipment such as diesel oxidation catalysts or particulate filters that can be installed on the exhaust of the diesel engine. Retrofits have been successfully applied to many diesel engines across the country and oxidation catalyst technology has been successfully applied to construction equipment used on several projects in the Northeast, including the Central Artery/Third Harbor Tunnel project in Boston and the Q Bridge Reconstruction project near New Haven, CT. Based on this success, some New England states (e.g., MA and CT) are now requiring construction equipment to be retrofitted with control devices or to use clean fuels. The Northeast Diesel Collaborative has prepared model construction specifications which the State of Rhode Island and the Rhode Island Airport Corporation could use as contract specifications are developed. The model construction specifications can be found on the Northeast Diesel Collaborative web site at URL address http://northeastdiesel.org/pdf/NEDC-Construction-Contract-Spec.pdf. Retrofit technologies may include EPA verified emission control technologies and fuels and CARB-verified emission control technologies. List of these control technologies can be accessed at http://www.epa.gov/otaq/retrofit/verif-list.htm.

Sustainability

EPA acknowledges and supports the DEIS commitment by RIAC (as required by Rhode Island law) to make the project sustainable by designing new or expanded buildings to meet the design, construction, operation and maintenance standards of the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Silver certification.

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[1] Section 6.19 Construction Period Mitigation (page 6-19); Air Quality Technical Report Section 3.3 Mitigation (page 3-26); Section 4.5 Mitigation (page 4-22); Section 5.6 Mitigation (page 5-22)